at least one of an optically negative compensating film and an optically positive compensating film provided between said first substrate or said second substrate and said polarizer, whereby refractive index anisotropy in a layer including said liquid crystal layer and said compensating film is made isotropic.

36. An active-matrix liquid crystal display according to claim 30, wherein said liquid crystal layer comprises a liquid crystal material with negative dielectric constant anisotropy, and liquid crystal molecules in said liquid crystal layer are aligned perpendicularly to each of said substrates when no voltage is applied between said pixel electrode and said opposite electrode.

37. An active-matrix liquid crystal display according to claim 36, further comprising quarter-wave plates provided on both sides of said liquid crystal layer, respectively, said quarter-wave plates having optical axis orthogonal to each other.--

REMARKS

The specification has been amended to employ more idiomatic English. No new matter has been entered by any of the foregoing amendments.

Claim 1 has been amended to clarify the claim, and better distinguish the claim from the prior art. More particularly, claim 1 has been amended to specify that the pixel electrode has two recesses formed therein, a first recess in groove shape for dividing the pixel electrode into two parts, and a second recess for connection the pixel electrode to a source electrode of an associated TFT. This clearly distinguishes claim 1 from Tokuo and also from Rho et al. which are the only references applied against independent claim 1. Moreover, this distinction is more than merely academic since the alignment control of liquid crystal molecules is achieved in the present invention by a groove-shape recess formed at the pixel electrode. This allows the opposite electrode to be uniformly and simply formed. This feature is new and is not taught by

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the art. Since neither Tokuo nor Rho et al. teaches or suggests pixel electrode having two recesses formed therein as specified by claim 1, as amended, it is submitted claim 1 and the several claims dependent thereon cannot be said to be anticipated by or obvious from Tokuo or from Rho et al., taken alone or in combination with any of the other references cited by the Examiner.

The indicated allowability of claims 11 and 12 is noted. Applicant has added new independent claim 22 corresponding to claim 11 rewritten in independent form, and new independent claim 30, corresponding to claim 12 rewritten in independent form. Dependent claims 23-29 and 31-37 have been added to further scope new independent claims 22 and 30, and are allowable for the same reasons as claims 22 and 30.

Pursuant to 37 CFR § 1.121, marked copies of the amended specification paragraphs and the amended claims showing the changes made therein accompany this Amendment.

Having dealt with all of the objections raised by the Examiner, the Application is believed to be in order for allowance. Early and favorable action are respectfully requested.

Form PTO-2038 authorizing a payment in the amount of $306.00 to cover the cost of the added claim fees accompanies this Amendment.

In the event that there are any fee deficiencies, or that additional fees are payable, please charge (or credit any overpayment) Deposit Account No. 08-1391 as necessary.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Assistant Commissioner of Patents, Washington, D.C. 20231 on July 3, 2002, at Tucson, Arizona.

By Diana Carr

NPS:nm

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MARKED COPY OF SPECIFICATION PARAGRAPHS

SERIAL NO. 09/739,478

DOCKET: NEC 00P310

MARKED SPECIFICATION PARAGRAPHS SHOWING CHANGES MADE

Paragraph bridging pages 2 and 3, beginning at page 2, line 12:

To overcome the problem, liquid crystal of a VA (vertical aligned) type has been proposed and put to practical use instead of the TN type liquid crystal for improving the insufficient viewing angle characteristics of the TN type liquid crystal display. A VA type liquid crystal display comprises a liquid crystal cell formed by liquid crystal in homeotropic (vertical) alignment with negative dielectric constant anisotropy between a TFT substrate and an opposite substrate, in which the liquid crystal molecules [rise] stand upright on the substrate when no voltage is applied, and when a voltage is applied, the liquid crystal molecules are laid in the substrate plane direction by an oblique electric field produced between a pixel electrode and an opposite electrode, thereby performing display. In this case, an area for one pixel is divided into a plurality of divided areas, and the directions in which the liquid crystal molecules are laid are varied among the divided areas to average the ways the display is viewed on the whole, which results in a wide viewing angle and favorable viewing angle characteristics. The divided area is also referred to as an alignment area. Such a liquid crystal display is referred to as a VA type multi-domain liquid crystal display.

Paragraph bridging pages 11 and 12, beginning at page 11, line 10:

TFT substrate 1 comprises: support member 11 formed of a transparent member such as a glass substrate; TFT 12 provided for each pixel on support member 11; passivation layer 13 formed of a silicon nitride for covering and protecting TFTs 12; overcoat layer 14 provided on passivation layer 13 and formed of an acrylic resin, for example; and pixel electrode 15 provided for each pixel on overcoat layer 14 and comprising a conductive layer such as an

ITO (indium oxide plus tin oxide) film. TFT 12 is used as a driving element for driving the corresponding pixel. Passivation layer 13 is formed directly on support member 11 in the region other than the area in which TFT 12 is formed. In this configuration, a groove formed in overcoat layer 14 provides recess 16 in groove shape in each pixel electrode 15. Each pixel electrode 15 is deposited directly on passivation layer 13 at the bottom of recess 16, and formed continuously over the side [surface] surfaces of recess 16. Thus, the depth of recess 16 is approximately equal to the thickness of overcoat layer 14. In the example here, the cross section of recess 16 is generally rectangular.

MARKED COPY OF AMENDED CLAIM 1

SERIAL NO. 09/739,478

DOCKET: NEC 00P310

MARKED CLAIM 1 SHOWING CHANGES MADE

1. (Amended) An active-matrix liquid crystal display comprising:

a first substrate including a pixel electrode provided for each pixel, and a driving element provided for each of said pixel electrodes;

a second substrate disposed opposite to said first substrate and including an opposite electrode; and

a liquid crystal layer sandwiched between said first substrate and said second substrate,

wherein said pixel electrode has two recesses formed therein, a first recess in groove shape [formed therein] for dividing said pixel electrode into two parts, and a second recess for connecting said pixel electrode to a source electrode of an associated TFT.